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ABSTRACT

As awareness of the threat of nuclear war has increased over the past decade (1975-1984), young people have learned to cope with the possibility of unimaginable catastrophe. This paper accordingly begins by reviewing literature on how people cope with the threat of nuclear war, in order to reconcile general theories of coping with nuclear anxiety with taxonomies of reactions to the nuclear threat. The study examines both theories and taxonomies in light of time series data collected by the Monitoring the Future project that relates to coping patterns, in order to address the question of whether the "success" Americans have had in coping with the nuclear threat has rendered them incapable of resolving the problem creatively or decisively. Time series analyses indicated that, rather than becoming fatalistic about the threat of nuclear war, young people tended to retreat to the position that the threat of nuclear war was not an imminent problem. Combining these ideas with a summary taxonomy of reactions to nuclear threat provides ideas about what aspects of people's attitudes must change if current nuclear policies are going to change. The paper concludes that arguments concentrating on the potential imminence of nuclear war, rather than the magnitude of its expected devastation, might have greater influence on public attitudes. (TE)

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High School Seniors' Styles of Coping with the Nuclear Threat, 1975–1984: Reconciling Theories, Taxonomies, and Empirical Trends

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High School Seniors' Styles of Coping With Nuclear Threat, 1975–1984: Reconciling Theories, Taxonomies, and Empirical Trends

As awareness of the threat of nuclear war has increased over the past decade, people have had to learn to cope with the possibility of unimaginable catastrophe. To a considerable extent, they have succeeded. While the proportion of high school seniors surveyed by the Monitoring the Future (MtF) project saying that they worried "a lot" about nuclear war rose from 7.6% in 1975 to 30.3% in 1982, the accompanying increase in pessimism was much more modest. Over the same period, however, "nuclear despair", the actual *expectation* of a catastrophic nuclear war, rose only slightly by some measures, and remained comparatively stable by others. (Bachman, Johnston & O'Malley, 1986; see Diamond and Bachman, in press, for a complete review of pertinent MtF data.)

Is coping healthy? In a society which reacts so strongly to "crises" – energy shortages, insurance cancellations, terrorism, AIDS –this apparent equanimity may seem difficult to understand. Some prominent physicists, psychologists, and military leaders have predicted that our present policies will lead to disaster, and potentially even extinction. (Einstein, 1946; Osgood, 1962; Rickover, 1986.) Lifton (1982) suggests that people have tended to seek *psychological* security at the expense of *actual* security; he maintains that successful coping with nuclear anxiety without changing present policies has proven counterproductive in important ways.

A small body of literature has developed on how people cope with the threat of nuclear war. Theoretical papers, commonly based on clinical work, which describe general processes of how people cope with the nuclear threat comprise much of the literature (Lifton, 1982; Nelson, 1985), but have evolved independently of more established theories of coping. (See, however, Grinspoon (1964) for a discussion of nuclear anxiety well-rooted in the psychoanalytic tradition.)

The present paper concentrates instead on two other portions of the literature. A number of partial taxonomies have been developed which describe various reactions to the

nuclear threat (de Rivera, 1984; Yankelovich & Doble, 1984.) Also, some "general" theories of coping have been applied, directly or indirectly, to the problem of nuclear anxiety (Janis & Mann, 1977.) The present paper attempts to reconcile some of these general theories of coping with the taxonomies of reactions to the nuclear threat; it will then examine both theories and taxonomies in the light of time series data relating to coping patterns which has been collected by MtF. Our hope is that the theories may allow for a better understanding of the taxonomies, that the powerful and peculiar nature of the nuclear threat may contribute to the general understanding of coping processes, and that both may contribute to our understanding of how coping styles have changed over the decade.

A threat unlike all others? Theories of coping with the nuclear threat have often emphasized the uniqueness of that stressor. Lifton (1982) has suggested that the scope of disaster which would accompany a nuclear war is beyond the human imagination — that, in Buber's phrase, we cannot "imagine the real." Schell (1982) has likewise pointed out that nuclear war carries with it the threat of extinction — "the death of death." This in turn removes meaning from all activities which assume future generations on Earth: the building of monuments of stone, of knowledge, of flesh, or of spirit. As such, the nuclear threat is alienating in a way that other threats — flood, famine, torture or genocide — cannot be.

Many of the threats addressed in coping studies are either retrospective (e.g. loss of a loved one, incest) or involve relatively well-defined situations (e.g. cancer, surgery). What is at stake, when it will (or did) occur, when it will — for better or worse — be concluded, are *somewhat* clear: one will or will not have cancer, it would require removal of a lung, one might die, and it will be over either way within a month. Perhaps most significantly, there is general acceptance that, whether one copes by denial, depression, or seeking information, one is in a situation in which some kind of coping is an appropriate and expected response.

The nuclear threat shares none of these characteristics. It is not clear what is at stake, for the individual or for the species. An attack might occur today, next month, or not at all. At best, it is a threat under which we must live forever, and which will never be resolved. We can only guess at how an attack might occur. There is not even a consensus that it is a threat with which *individuals* need to cope. Concern over an upcoming biopsy is considered normal; a similar level of concern over an upcoming vote on weapons deployment is not.

An apt analogy for the nuclear threat is the Sword of Damocles, which hung by a hair over the ancient noble's head, spoiling his dinner. Yet the nuclear threat is more complicated than that. It is as if Damocles, seated at the banquet, *thinks* he sees the sword hovering above, but is not sure: if we turns and squints a certain way, it seems that it may be an illusion. Of the guests at the banquet, some resolutely claim to see the Sword; others are not quite sure. If they squint a certain way . . ..

Consideration of the nuclear threat, then, forces theories of coping to deal with a stressor which is prospective and unpredictable, with unimaginable etiology and consequences, which cannot be controlled. (We will refer to this as a "Damocletian" stressor.)

The nuclear threat is unusual in at least one other way: it requires collective action both to propose and negotiate methods of alleviating it. Bandura (1982) has suggested that groups of people — nations or social movements — may experience similar "perceptions" as do individuals regarding their ability to solve problems. This brings us to the area of politics, where the issue is even more perverse. While the leaders of both superpowers have asserted that a nuclear war cannot be won and must not be fought, their actual message is somewhat mixed. Denunciation of war is accompanied by preparations for "winning and surviving an extended nuclear war" (Dyer, 1985) Strongest of all comes the message that a nuclear war *will* never be fought (Shultz, 1983), though it is unclear why this should be so. Despite the threat of bellicose plans, of accidents or

miscalculations, the "unthinkable" is held to be unthinkable, and denial of imminent danger is social supported by those who are assumed to be in a position to know.

We are left with a concern that bridges from the the coping literature into political science: has the "success" – if it is that – Americans have had in coping with the nuclear threat rendered them incapable of generating as much passion for this issue as for those of crime, taxes, and abortion? Does the amelioration of threat leave the public with only "non-attitudes" of limited import or substance? (Converse, 1960)

If creative, dramatic, intricate or tenacious solutions are required to loosen the nuclear Gordian knot (Etzioni, 1962), has the public coped too well to rally behind them? Public diffidence towards the nuclear threat may preclude not only the intricate proposals for negotiation, disarmament, or international control of nuclear weapons proposed by the political left (Osgood, 1962; White, 1984; Schell, 1982) but also the dramatic proposals emanating from the right. If the only way to prevent a full-scale nuclear war *were* a limited nuclear strike on the Soviet political infrastructure, or the expense of one (or two) trillion dollars on the Strategic Defense Initiative, it is not at all clear that the public would be willing to make the sacrifices necessary to implement such a solution. (It is not clear, of course, that they would have much say.) The result may be "policy drift", which Osgood sees as ending only in Pyrrhic victory, defeat, stagnation, or disaster (1962). We are faced with the question: does "successful coping" with the nuclear threat rule out the other alternative – solving the problem?

General theories of coping. Most coping researchers study the effects of "life events" stress rather that chronic stressors such as the nuclear threat, and when chronic stress has been studied, it has often been operationalized as an agglomeration of minor life stresses, as one might experience at a bad job or in a failing marriage (Kessler, Price & Wortman, 1985.) The closest the mainstream coping literature has come to addressing the Damocletian nuclear threat are studies of reactions to technological catastrophes involving radiation. (As this is written, studies on reactions to the Chernobyl accident have not yet

been published.) Collins, Baum & Singer (1983), for example, have studied residents' reactions to the aftermath of the Three Mile Island (TMI) nuclear accident of 1979. They verified that residents of the area surrounding the reactor experienced elevated levels of stress up to two years following the accident, as assessed by self-report, task performances, and catecholamine levels. Among those residing near TMI, however, the found that those who either denied the existence of the problem (e.g. endorsing statements such as "I refuse to believe what is happening") or who concentrated on a "problem-solving" approach to the situation, experienced more of the behavioral consequences of stress than those who attempted to cognitively reappraise the situation. Those who reappraised the situation, endorsing such sentiments as "something good may come of this", were described as concentrating more heavily on their own emotional management than on addressing the problem at hand. Collins et. al., suggest that the disadvantage of denial was that it was difficult to maintain for long, while problem solving was simply not possible at TMI.

Two theories of coping with stress have been preliminarily applied to the nuclear threat. Rogers and his associates have presented *protection motivation theory* as a means of understanding attitude change under stress (Rogers & Mewborn, 1976; Maddux & Rogers, 1983.) This theory posits four factors, which may be conceived of as the *probability* and *magnitude* of a *threatening stimulus* and a *coping response*, and attempts to predict the likelihood of individuals' choosing a given coping response. The theory thus incorporates many of the concepts used by Bandura (1982), Lazarus (1966), and other notable cognitive theorists to explain coping behavior.

Feshbach (1986) has attempted to apply protection motivation theory to the nuclear threat. Dealing with fear appeals in general, Rogers & Mewborn (1976) found that beliefs about the efficacy of a potential coping response (which may be conceived of as the magnitude of the ameliorative effect) carried the brunt of the weight in determining whether a person would adopt the response. This effect was magnified for more noxious

stimuli. Absent the ability to cope effectively with threat, however, increased noxiousness may actually have a "boomerang" effect and decrease the intent to adopt the coping response, as was found in a study of cigarette smoking. This work suggests that a major element of fostering attitude change or changing policies is convincing people that a proposal will work effectively towards the prevention of nuclear war, should it be implemented.

A later conception of protection motivation theory emphasized the role of beliefs about one's own ability to produce a coping response (self-efficacy) on intent to adopt the response (Maddux & Rogers, 1983). In this study two patterns of coping are also introduced. The *precaution* strategy for coping was adopted if subjects perceived a low probability of a threatening event occurring, but perceived high probabilities of being able to produce an effective coping response, and perceived that response to be highly effective. Following this strategy, subjects would adopt a coping response even in the absence of threat, "just to be safe."

Alternatively, given a high probability of a threatening event occurring, either belief in the ability to produce a coping response *or* in the effectiveness of that response would be sufficient to lead to an intent to adopt the response. This *hyperdefensiveness* strategy assumes that the person feels that he or she has nothing to lose and everything to gain. Maddux & Rogers suggest that it may be directed as much towards the aim of reducing anxiety as avoiding danger, and that it may give way to a posture of helplessness and resignation.

Janis & Mann's (1977) *conflict theory* addresses coping with stress from a background in the decision-making literature, where it is the most widely favored model of "hot" decision-making (Abelson & Levi, 1985.)

Janis & Mann suggest five different reactions to threats, which correspond to the five diamonds at the top of the flow diagram in Figure 1. Facing an appraised threat, the decision-maker first decides whether the risk would continue if she continued her present

actions. If it would not, she adopts the reaction of *unconflicted inertia*. If it would, she asks whether the risk would continue if she took an immediately available action. If not, she reacts with *unconflicted change*.

If no "easy" solution would alleviate the risk, the decision-maker decides whether a satisfactory solution is at all possible. If a solution does seem possible, she decides whether enough time is available to find it. If there is insufficient time to think things through rationally, she will become *hypervigilant*, essentially panicking and accepting the first quasi-satisfactory solution to surface. Given sufficient time, however, she will undertake a *vigilant* decision-making process.

If a solution does not appear to be possible, the decision-maker will experience *defensive avoidance*. If she believes that the decision can be postponed, she will *procrastinate*. If not, she will try to find others to make the decision for her, or *buckpass*. If neither option is possible, she will reluctantly choose what seems to be the best of a bad lot of alternatives, and then *bolster* that decision by selective appraisal, rationalization, and denial. While the conflict model stipulates that all of these stages are ordered sequentially, that assumption may be challenged. Furthermore, the model recognizes that a person may use more than one reaction to the same threat.

The diagram in Figure 1 adapts the conflict model specifically to the problem of nuclear war. The end products of the decision process are then associated (dotted lines) with the corresponding coping style presented in the typology to follow.

While the conflict model may provide insights into coping with the nuclear threat, it is not entirely appropriate. First of all, it is questionable when applied to a continuing stressor which the decision-maker knows may develop at any time into a full-fledged disaster. Second, it conflates personal and collective action. Determining whether there is a good solution to a risky problem carries different meanings when construed as "Can *I* do something constructive?" and "Can something constructive be done?" It is certainly possible that, regarding the nuclear threat, a person could believe that a solution is

possible, but that she could have no role to play in implementing it. In such cases, it is unclear what coping strategies the conflict model would predict.

It seems likely that for most people, coping with the nuclear threat involves less the role of *player* than of *spectator*. A fitting analogy may be that of a baseball fan. Over the course of a season, the fan does experience a number of threats: the success of rival teams, favorite players experiencing injuries or slumps, etc. She may feel strongly that there are good solutions to these problems: fire the manager, trade for a relief pitcher, etc. She may express these feelings vociferously to friends, and perhaps write the local newspapers. But she will generally engage in what the conflict model would call "buckpassing", waiting for others to take action. Although the threats may be, subjectively, quite acute to her, as she lives and dies by her team's prowess, and while she may *know* that starting that rookie shortstop from Bad Axe would alleviate the threat of a dismal season, she will generally construe herself as a spectator rather than a player in the conflict. The occasional fan who journeys to the manager's house to plead her case has obviously construed things differently.

Research on coping with the nuclear threat. The most influential work on coping with the nuclear threat has probably been Lifton's (1982). Relying on interviews with samples ranging from survivors of Hiroshima to young Americans, he has coined the term "psychic numbing" to describe a process by which a person can become "closed off" to unsettling information. Psychic numbing allowed survivors of Hiroshima to inure themselves to the suffering around them in the days and weeks following the blast. Lifton feels that a similar process has allowed the public to cope with the threat of nuclear war. His recent work suggests that psychic numbing has been waning as recognition of the extent of the nuclear threat has become more widespread. An increasing number of people, he maintains, have now resigned themselves to the likelihood that a war will occur, a fatalistic stance he calls "waiting for the bomb."

Recent empirical work has attempted to document the effects of "nuclear anxiety".

Newcomb (1986) has indicted nuclear anxiety as a factor leading to drug abuse, depression, and other ills, while speculation has continued for the past twenty years that growing up under the threat of nuclear destruction may stunt young people's ability to care about themselves and the future (Schwebel, 1965; Escalona, 1965.)

Other researchers have remained unimpressed at the incidence of nuclear anxiety. Coles (1985) and Adelson & Finn (1985) have noted the relative dearth of public uproar about nuclear weapons, and suggest that people seem to be able to work around whatever anxiety they experience. Coles attributes the widespread expressions of anxiety which have recently been documented among youth (Beardslee & Mack, 1982; Goldenring & Doctor, 1985) to demand characteristics of the surveys and to priming by concerned parents; Adelson & Finn attribute the results to sampling biases and a conspiracy between left-wing media and educators.

Diamond and Bachman (in press) have tried to reconcile the contradictory information on the effects of the nuclear threat by separating the construct of nuclear anxiety into two components. The "worry about nuclear war" which increased so dramatically between 1975 and 1984 is interpreted as "nuclear concern", the recognition of the nuclear threat as a significant problem which demands public attention. While nuclear concern seemingly indicates the absence of "psychic numbing", it does not correlate with the experience of any of the evils Newcomb describes. "Nuclear despair", by contrast, represents a belief that a nuclear war will occur and that humanity will not survive it. Nuclear despair, which rose so modestly over the decade, does correlate with the evils Newcomb cites.

Three recent studies have attempted to generate typologies of reactions to the nuclear threat. Tyler & McGraw (1983) has studied active behavioral responses to the nuclear threat, comparing "survivalists" and peace activists, and noting some of the differences in perceptions and beliefs which distinguish the groups. (Tyler & McGraw focuses only on activism among what White (1984) calls the "tension-reduction"

perspective.)

Yankelovich & Doble (1983) describe an analysis which clusters survey respondents into four different basic orientations towards the nuclear threat. They identify 23% of the population as *threat minimizers*, who do not believe that a nuclear war will ever take place, and thus feel secure endorsing an aggressive, "risky" foreign policy. 21% of the population are *conciliators*, who see nuclear war as an urgent problem and support U.S. initiatives towards reducing the threat of nuclear war. 31% of the population harbor a *live and let live* attitude towards the Soviet Union; while they are opposed to and suspicious of the Soviets, they prefer an accommodating to a belligerent relationship, favoring some sort of peaceful coexistence between the superpowers. The remaining 25% of the population sees the conflict with the Soviets in *religious* terms: they fear both nuclear war and the "demonic" Soviets equally, thus favoring a policy of military strength and non-adventurism. They are also inclined to leave the course of foreign policy to the experts.

De Rivera (1984) reported results of extensive interviews with a large number of respondents, and emerged with detailed descriptions of five strategies of coping with the threat of nuclear war. Two are support for deterrence and tension-reduction. Other coping methods include deferral to authority, adopting a fatalistic attitude towards the nuclear threat, and acceptance of the nuclear threat as an important problem, but not of *imminent* concern.

The findings of these studies are summarized in Table 1. As may be seen from the bottom half of the table, the overlap between typologies is weak, a fact attributable mainly to the different goals and methods used in each. From this table, we have created a list of seven basic reactions to the nuclear threat, each implying a different set of values and beliefs. The top half of the table reviews some of the theories which have been applied to the nuclear threat, noting which processes are thought to lead to which reactions. The present analysis examines whether the incidence of these associated beliefs has changed over the past decade, in hopes of determining whether people have shifted coping styles

over that period.

We will do so by analyzing responses to the Monitoring the Future questionnaires over the decade beginning in 1975. The questionnaires ask students not only about their nuclear concern and despair, but also about a wide range of topics, including their general political opinions, beliefs about nuclear weapons and general military policies, support for and participation in the political system, self-efficacy, experience with drugs and crime, expectations for the future, and mental health. (A full review of trends for items in these and other areas may be found in Diamond and Bachman, in press.) The descriptions of coping styles which follow include predictions about how students adopting each style might respond distinctively on some of these measures.

Method 0: Failure to cope. We number this first reaction "0" because it represents the breakdown of the coping response. These individuals recognize the threat of nuclear war as real and imminent, and are emotionally unable to "live with" that threat. Individuals who failed to cope with the nuclear threat would be those most likely to be led to drug use and depression, as predicted by Newcomb. Within the MtF sample, such individuals would exhibit high levels of Nuclear Despair, endorsing the belief that humanity will be destroyed in a nuclear holocaust. They would be unlikely to feel any sense of individual or collective efficacy, however, which might allow them to overcome or reconstrue this expectation and move to a more emotionally effective coping response. Neither Tyler & McGraw, Yankelovich & Doble, nor de Rivera report this to be a predominant attitude.

Method 1: Survivalism. Tyler & McGraw sugges that those who attempt to cope with the threat of nuclear war do so on the basis of their answers to two questions: is nuclear war *survivable* and is nuclear war *preventable?* (Tyler & McGraw sugges that affirmative answers to both of these questions are psychologically, though not logically, incompatible.) Survivalists believe that nuclear war is likely, but expect to live through it. They tend to exhibit conservative foreign policy attitudes, but have little interest in the

formal political system. While they would exhibit high Despair on items which predict war (although not those which predict extinction), they would score low on Nuclear Concern. They would score highly on personal efficacy.

Method 2: Tension-reduction activism. Those who see nuclear war as preventable, who have a strong sense of personal efficacy, and who support tension-reduction in foreign policy become tension-reduction activists. More than any other group, they see personal action as appropriate and necessary for the prevention of nuclear war. Diamond and Bachman (in press) reported no correlation between support for most tension-reduction policies, which would be the primary distinguishing characteristic of this group, and despair. They might also be expected to express high levels of political efficacy, but decreasing levels of support for political institutions — such as the Presidency — over the decade. This group seems essentially identical to the "Conciliatory" group identified by Yankelovich & Doble.

Method 3: Deterrence activism. De Rivera's sample contained no survivalists (who presumably avoided such likely targeted areas as metropolitan Boston), but did include a number of tension-reduction activists. The first of these styles, similar to the "Threat minimizers" in the Yankelovich & Doble typology, minimizes the dangers of nuclear war and places faith in the strength of our military forces to deter Soviet attack. This style would be characterized by general, and specifically nuclear, conservatism, low feelings of despair, and increasing support over the decade for political institutions.

Method 4: Fatalism. This is Lifton's "waiting for the bomb" coping style. Individuals accept that nuclear war is likely, reflected in high scores on Despair and related items, but the fact doesn't bother them that much: species come and species go, after all. This style would be marked by low levels of political support and participation, possibly low levels of concern, and low expectations of future success and plans about the future. This style might also lead to "hedonistic" acting out, though not, presumably, to mental health problems. It does not fit in neatly to the Yankelovich & Doble framework,

seeming closest to the over half the "Religious" group who expect their faith to protect them in a nuclear war, and to a rationalization of the position of the "Threat Minimizers."

Method 5: Deferral to authority. This coping style avoids thought about the nuclear threat at all, and would not likely be marked by extreme views on questions of appropriate nuclear policy. Instead, faith is placed in the ability of the government — or, failing that, God — to prevent war. This style would be marked by low levels of concern, plans to participate in the political process, and probably by low levels of despair and general efficacy as well. Support for political institutions would probably be high, however.

Methods 3 and 5 seem to jointly comprise what Lifton refers to as psychic numbing. While method 5 directly reflects one of the coping styles described by de Rivera, it seems to reflect elements of both the "Live and Let Live" and "Religious" methods described by Yankelovich & Doble.

Method 6: Non-imminent problem. De Rivera describes this coping style as one that takes the stand that nuclear war is likely, but only in the far future. This style would lead to moderately high levels of concern, but low levels of despair and of efficacy in dealing with the nuclear threat. It entails the acceptance of nuclear war on an intellectual level without acceptance on an affective level: colloquially, a "lip service" stance. De Rivera suggests that this orientation would sap motivation for action. It does not map well onto Yankelovich and Doble's dichotomy, but seems most compatible with the "Live and Let Live" stance which requires relatively little in the way of quick, forceful political action.

Methods

The Monitoring the Future project has been surveying approximately 17,000–18,000 high school seniors per year from 1975 to the present. Responses are obtained to over 1000 questions which are distributed among five questionnaire forms. Each form contains a core of questions on demographics and drug use, and about 20% of the pool of "unique" questions. Since each questionnaire form is distributed to only one-fifth of the total sample ($N \cong 3500$), correlational analyses pairing items from different forms are

unfortunately not possible. (See Bachman & Johnston (1978) for further description of the MtF sample and procedure.)

Results and Discussion

Diamond and Bachman (in press) report the following trends. Nuclear concern rose dramatically from 1975 to 1982, and has remained at a high level. Nuclear despair has increased only slightly over the decade. Political opinion among high school seniors has generally become more conservative, though since 1981 there has been growing support for tension-reduction. While support for political institutions has increased, intent to participate in the process has waned slightly. Drug use, general self-efficacy, and possible measures of hedonistic acting-out have all remained relatively stable, while expectations for future success have increased. No mental health problems or other expected effects of a failure to cope with nuclear threat have increased.

The rise in concern about nuclear war suggests that some sort of shift in the popularity of coping styles has taken place, as suggested by Lifton. Fewer seniors deny that nuclear war is possible or likely, suggesting at least a partial abandonment of Method 5 coping, and to a lesser extent Method 3. In abandoning denial, high school seniors have not stopped coping with the nuclear threat (Method 0), as indicated by the stability of despair and mental health measures. The stability of despair, and general support for the political process, rules out an increase in survivalist orientation among the sample (Method 1). Seniors have not reacted to their newfound concern by increasingly placing their faith in tension-reduction (Method 2) or deterrence (Method 3), since the measures of these orientations were stable until 1982, when the rise in concern peaked.

This leaves open the possibility that increasing proportions of seniors have adopted either methods 4 or 6. The sustained support for the political process, faith in their own futures, and lack of hedonism suggest that the trend has not been towards hedonism. A movement from Method 5 to Method 6 coping, by contrast, is the interpretation most consistent with the pattern of change in evidence over the decade. This movement would

imply a growing recognition on the part of seniors that the nuclear threat cannot simply be ignored under the presumption that the government or God will take care of it. While the threat is recognized as a real problem, however, it is not recognized as a *pressing* problem. The continually renewed assumption is made that humanity will have sufficient time to address this problem before disaster strikes; most people have as hard a time conceiving of imminent nuclear war as a solipsist would have conceiving of imminent death.

Implications for attitude change. Regardless of one's political beliefs, an increasing incidence of Method 6 coping is a more optimistic notion than the increase in Method 4 that Lifton predicted. It seems easier to convince people that a threat is more imminent than it was believed to be than that they have a stake in trying to find effective ways to counter the threat. Yet, it seems unlikely that attitude change would be as easy to initiate as reminding people that a nuclear war could happen at any time. Presumably, the adoption of the "Non-imminent problem" coping style results in part from perceptions of low self-efficacy, as in the baseball fan analogy above. If this coping method does have qualities of defensive avoidance, we may find it useful to reexamine Janis & Mann's conflict model to determine the likely consequences of attempts at attitude change.

Reconciliation of conflict model and coping mechanisms. The various nodes of the conflict model map nicely onto the seven coping mechanisms described above, and suggest some distinctions not found in the Tyler & McGraw, de Rivera, and Yankelovich & Doble studies. The bottom half of Figure 1 associates various coping styles with beliefs stemming from the questions posed in the conflict model.

For unconflicted inertia to occur, the decision maker must truly believe that there is no risk of a nuclear war given a continuation of present government policies. This is a difficult proposition to accept, but it seems clear that one holding this proposition would probably cope by deferring to authority (Method 5.)

Unconflicted change would occur only if an available option could eliminate the possibility of the risk of nuclear war; this already presumes the decision maker's

recognition that the original course of action was risky. Again, it is difficult to understand this position regarding the nuclear threat. It is, however, consistent with Tyler & McGraw's report of the attitude of survivalists (Method 1). Most survivalists do not undertake the requisite life changes with the impression that they are bettering their chances of survival from none to slim; they fully expect to withstand the coming nuclear war. Such an attitude makes the most sense if conceived of as unconflicted change to a course of action which completely eliminates the nuclear threat to themselves.

As noted previously, the conflict model suggests that the question of how much time is available to find a workable solution is asked only if the assumption is made that a good solution exists. It seems plausible, however, that one could feel that there was not enough time for a solution without believing that a good solution was possible. In either case, the hypervigilant panic reaction is reminiscent of a Method 0 failure to cope, though true hypervigilance might only be seen in situations where there was real fear of an imminent bomb attack. In line with protection motivation theory, we might more commonly expect people to oscillate between panic and depression.

Most of the coping mechanisms cited fall under the category of defensive avoidance. Again, the model suggests that questions in the second row of Figure 1 would be answered in the sequence shown, but it seems plausible that they would not be. The attitude that the threat of nuclear war, while perhaps real, does not demand immediate attention — which the conflict model calls procrastination —seems nicely to describe Method 6 coping. The next coping style, buckpassing, is reflected in Method 5, deferring the problem to the government. While the conflict model predicts that people would decide to buckpass only after deciding that procrastination is impossible, the present data suggest that, for this issue, the process may be reversed. In fact, considering the "spectator" analogy, this proposition seems quite reasonable.

Those who are unable to use either of the above approaches would, according the conflict theory, choose the least bad alternative and bolster that choice as strongly as

possible. Adoption of coping methods 2, 3, and 4 seem to possibly result from bolstering. Certainly the decision to be fatalistic about potential human extinction would require the sort of cognitive tapdancing Janis & Mann describe. Alternatively, those incapable of otherwise reducing their nuclear anxiety may latch onto either a pro-deterrence or pro-tension-reduction position and try to squeeze as much succor out of it as possible.

That does not mean that all who endorse deterrence or tension-reduction do so simply to pacify themselves. Conflict theory states that those who believe that a solution to the problem of nuclear threat is possible, and that sufficient time exists to work on it, will tend to cope with the threat via vigilant problem solving behavior. This could entail a preference for deterrence, tension-reduction, or more commonly a mixture of the two. (Coping methods 2 and 3 may be viewed as ends of a continuum, and one person may use different methods of coping at different times.)

The difference between those who choose deterrence or tension-reduction after vigilant information processing (which we will call "true activism") and those who choose these options as a form of defensive avoidance (which we will call "bogus" activism) is that the former truly believe their plans to be efficacious and should tend to put their energies into making them come about. The latter are more concerned with their own emotional well-being and would tend to put their energies towards seeking out validation of their positions. It is unlikely that the "bogus" coping methods would lead to activism, since such activities most often involve continuing clashes with those antagonistic to one's position. Rather than becoming *players* in the nuclear policy debate, people using these methods might be expected to maintain *spectators*.

Should this distinction predicted by conflict theory hold up, it would point to the importance of distinguishing between these two styles in research. Someone adopting a bogus tension-reduction coping style might be adroit at answering questions in such a way as to express a strong tension-reduction position. But her support would be "soft", and she would be unlikely to play an active role in working for substantive policy changes.

We have no way of directly assessing whether those who have endorsed tension-reduction- or deterrence-prone positions within the MtF sample hold bogus or true activist positions. If we accept an endorsement of political activities in general (petitioning, attending rallies, letter-writing) as a rough measure of activism in general, the best we can do is examine whether the correlation between militaristic views and support for activism has varied substantially over the past decade, and it has not. Clearly, however, better methods of determining depth of commitment to deterrence and tension-reduction activism are needed.

Coping and Strategic Defense Conflict theory also suggests directions for future attitude change. Since the last of the yearly samples reported herein was taken, the Strategic Defense Initiative (Star Wars) program has come increasingly into public view. (Gallup, 85.) The theory suggests a number of different ways that people might come to favor SDI. Those who accept President Reagan's proclamation that it will "render nuclear weapons obsolete" may well accept it without further ado, experiencing unconflicted change. In light of continuing criticism of SDI, however, they may be forced to decide whether it is simply a good possibility worthy of study, and some may presumably emerge from a vigilant decision making process deciding that it is. These people would probably become the strongest and most effective proponents of SDI.

Others, however, may be less interested in developing a finely reasoned stand on the issue. Some of these may decide that they will agree with the proposal if the government thinks it is a good idea, passing the buck. Theirs would be a cool endorsement of SDI, more of a willingness to see it happen than true partisanship, although they might express strong opinions in favor of it if they perceive that the government is very much behind it. Those who would still be left anxious after an unthinking passing of the buck would be forced to declare their support for SDI and bolster that point of view. They, again, would be likely to express strong support for SDI, but only because it is the fruit of their "grasping at straws." People coping in this manner would be unlikely to take strong action

in favor of SDI, preferring instead to convince themselves and let the issue drop (or be handled by "players".)

The rise in support of SDI (Gallup, 1985) probably reflects a movement towards bogus and true deterrence, and towards deferral to the government. Yet, aside from some surveys limiting their reports to respondents who are at least fairly aware about the issue, most surveys do not allow for distinctions between those who support SDI because they believe in it, because they would *like* to believe in it, and because they would like not to even think about the threat of nuclear war.

Summary and Conclusions

As American high school students have become increasingly aware of the dangers of the nuclear threat, they have had to abandon much of the "psychic numbing" they had previously enjoyed. Time series analyses indicate that, rather than becoming fatalistic about the threat of nuclear war, they have tended to retreat to the position that while the threat of nuclear war is a problem, it is not an imminent one. The cognitive processes which may underlie such thinking can be understood through the application of general theories of coping and decision making, such as Janis & Mann's conflict theory and Rogers's protection motivation theory, to the problem of nuclear anxiety. Doing so not only strengthens the literature addressing coping with the nuclear threat, but helps to test and improve these general theories themselves.

Combining these theories with a summary taxonomy of reactions to nuclear threat gives us some idea about what aspects of people's attitudes must be changed if current nuclear policies are going to change. Much evidence suggests that a crucial role is played by the lack of self-efficacy people may feel as they consider how best to prevent nuclear war. Our interpretation of conflict theory leads us to suggest that people might evidence very similar behavior — support for deterrence or tension-reduction — based on very different decision processes. "Bogus" activists would differ from "true" activists in having adopted their advocatory positions for emotional reasons, and not after attempts at vigilant

problem solving.

Beyond this, we can note that people can cope with chronic stress by developing a comfortable way of reappraising the threat. It appears that the belief that there will be plenty of time in the future to worry about how to prevent a nuclear war, so current actions are not required, may serve as such a comforting reappraisal. If this is true, then arguments concentrating on the potential imminence of nuclear war, rather than the magnitude of its expected devastation, might have greater influence on public attitudes.

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Table 1 – Reconciliation of Theories of Coping and Taxonomies of Styles of Coping with Nuclear Threat

Coping Styles	Failure to Cope (Method 0)	Survivalism (Method 1)	Tension-reducing Activism (Method 2)	Deterrence Activism (Method 3)	Fatalism (Method 4)	Deference to Authority (Method 5)	Problem Only in Future (Method 6)
Theories							
Lifton		psychic numbing(?)		psychic numbing(?)	waiting for bomb	psychic numbing	
Rogers et. al.	post-hyper-defensive	prob hi mag lo cope eff hi self-eff hi	prob hi cope eff hi self-eff hi	prob lo cope eff hi self-eff hi (precaution)		prob lo cope eff lo self-eff lo	
Janis & Mann	hyper-vigilance	unconflicted change	bogus, true T-R	bogus, true Det.	fatalism	inertia, buckpassing	procras-tination
Taxonomies							
Tyler		survivalists	activists				
Yankelovich & Doble			conciliatory	threat minimizers	minimizers, religious	religious let live	live & let live
de Rivera			activists	deterrers	fatalists	defer to authority	lip service

See text for definitions of "prob", "mag", "cope eff", "self-eff" under protection motivation theory (Rogers.) "Bogus" and "true" are not terms used in the conflict theory model (Janis & Mann.)

Decision-making flow chart -- conflict model

(adapted from Janis & Mann, 1982)

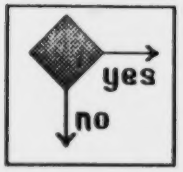

Figure 1:
Model of coping with nuclear threat. Numbers correspond to coping styles in taxonomy.